BizNGO 2021 Annual Meeting

Transparency & Justice Rising

Thank you Sponsors!

Clean Production Action

BizNGO

Virtual Meeting Overview

5 Sessions / 2 days

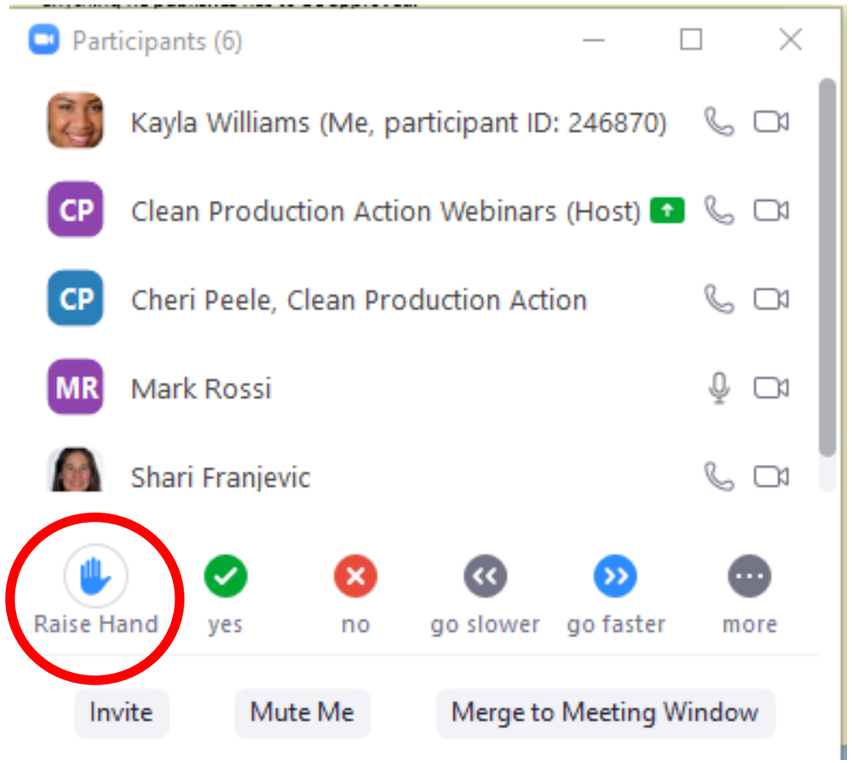
1. Addressing Environmental Justice Through Chemicals Management (December 7 @ 11am-2pm EST)
2. Transparency: Disclosing Chemicals in Products & Supply Chains (December 7 @ 3pm-6pm EST)
3. Safer Chemicals in Manufacturing (December 8 @ 11am-12:30pm EST)
4. Standards, Indexes, & Purchasers Tracking Corporate Progress to Safer Chemicals (December 8 @ 1:30pm-3pm EST)
5. **Circularity & Toxics: Bringing Chemical Safety to Closed Loop Systems (December 8 @ 4pm-5:30pm EST)**

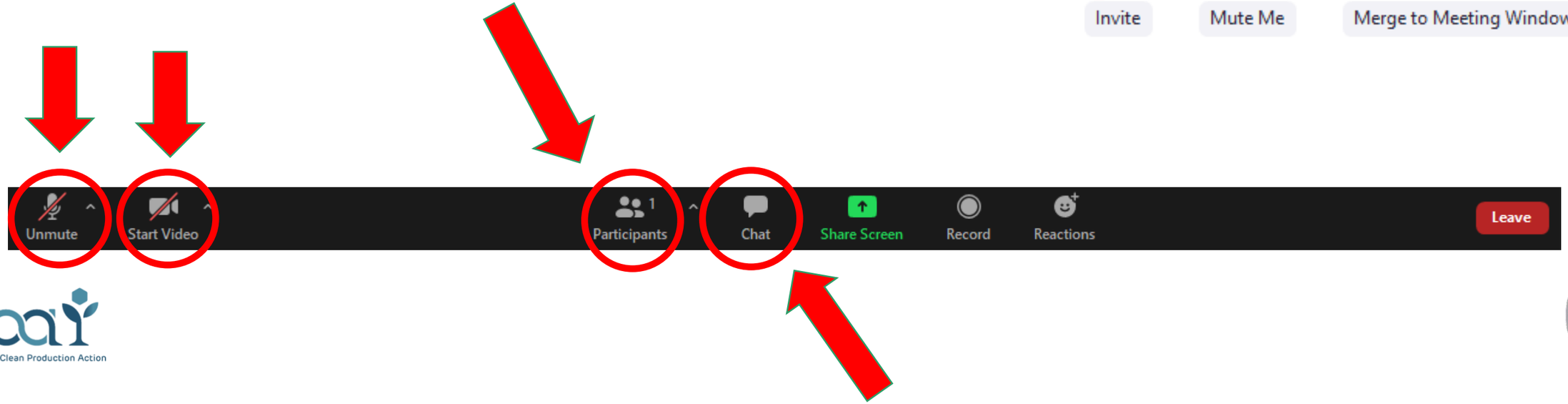
cpa Clean Production Action

BizNGO

Zoom Protocol

- **Enter participant ID if calling in**
- **Rename yourself to include your organization**
- **Raise hand** to speak
- **Chat** for questions/comments
- **Mute** yourself
- **Feel free to show video**
- **Only presentations recorded**





Chatham House Rule

Participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed; unless approved by the participant

Clean Production Action

BizNGO

Session 5

Circularity & Toxics: Bringing Chemical Safety to Closed Loop Systems

Session 5 Agenda

4:00 Presentations
- Sarah Doll
- Sue Chiang
- Troy Virgo

4:35 Questions & Answers

4:45 Small groups

5:15 Report backs & wrap up

5:30 Adjourn

Press release | 14 October 2020 | Brussels

Green Deal: Commission adopts new Chemicals Strategy towards a toxic-free environment

To move towards toxic-free material cycles and clean recycling and ensure that **"Recycled in the EU"** becomes a benchmark worldwide--
The Commission will:
minimise the **presence of substances of concern in products ….**in **those with the highest potential for circularity,** such as textiles, packaging including food packaging, furniture, electronics and ICT, construction and buildings.

The popular promotion of circularity has generally downplayed chemical hazards – but this is changing

Chemical Recycling of Polymeric Materials from Waste in the Circular Economy
Final Report
prepared for
The European Chemicals Agency
August 2021

SCIP

As of January 2021, consumers and firms involved in waste management will be able to access information on substances of concern in products in the 'SCIP' database. SCIP is the database for information on **S**ubstances of **C**oncern **I**n **P**roducts

Clean Production Action

BizNGO

Session 5 – Intended Outcomes

--Broader awareness on circularity and links to environmental justice

--Identify challenges and solutions to circularity and toxics such as

- Methodologies / frameworks / concepts / principles
- Transparency
- Preferred materials/products, etc

Clean Production Action

BizNGO

Speakers

Sarah Doll
National Director,
Safer States

Sue Chiang, MPH, MPP
Food Program Director,
Center for Environmental Health

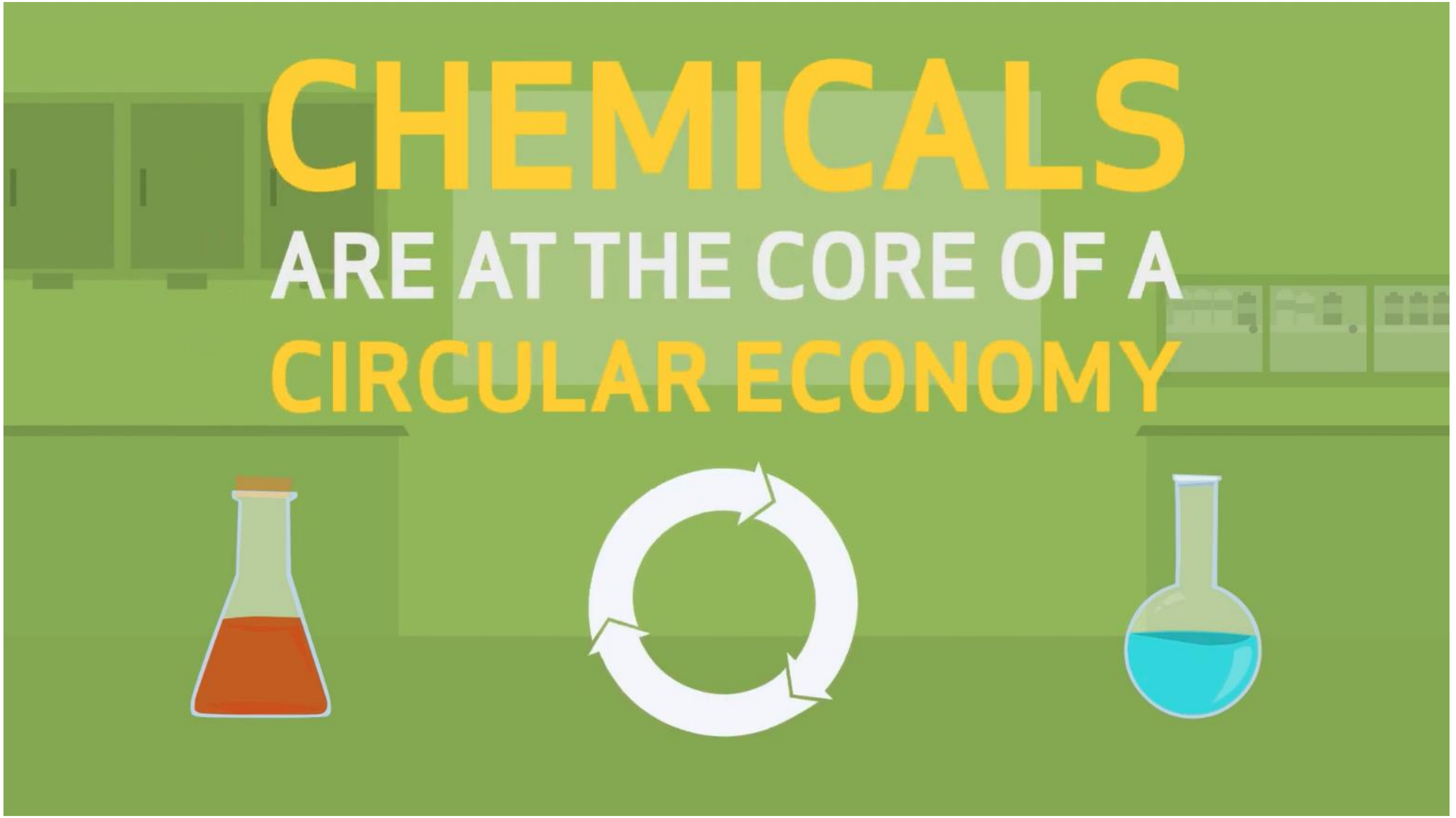
Troy Virgo
Director of Sustainability and Product Stewardship,
Shaw Industries Inc.

For bios: https://www.bizngo.org/conference/2021-speakers

Addressing Toxics in Circularity

Sarah Doll
National Director

safer states



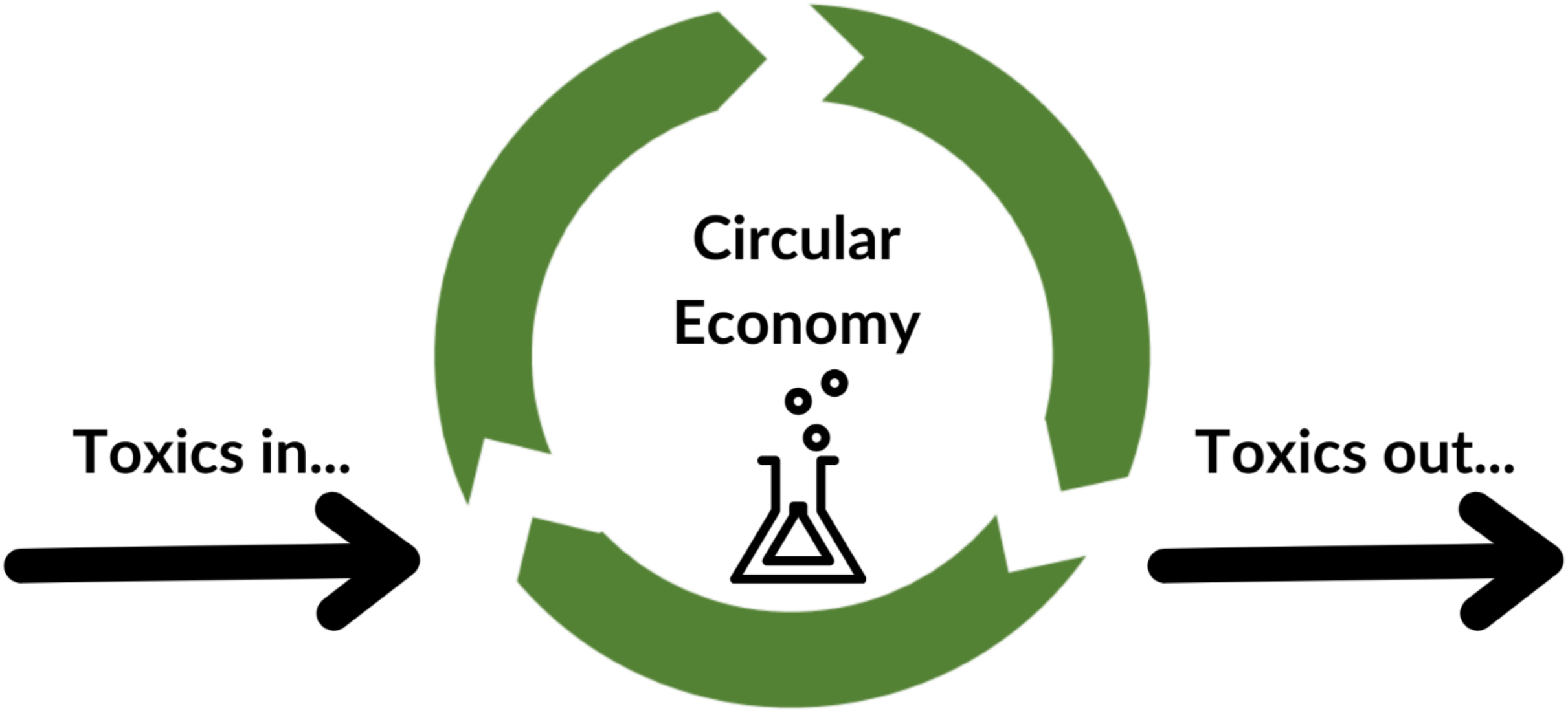
Source: European Chemicals Agency (https://chemicalsinourlife.echa.europa.eu/chemicals-in-a-circular-economy)

Clean Circular Economy

“[the] circular economy begins with a design of products that reduces material input, avoids the use of toxic chemicals and enables reuse and recycling.”

“the use of toxic additives in plastics means that if such plastics are recycled, the toxics in them will form part of new hazardous products.”

–UN report on plastics and human rights

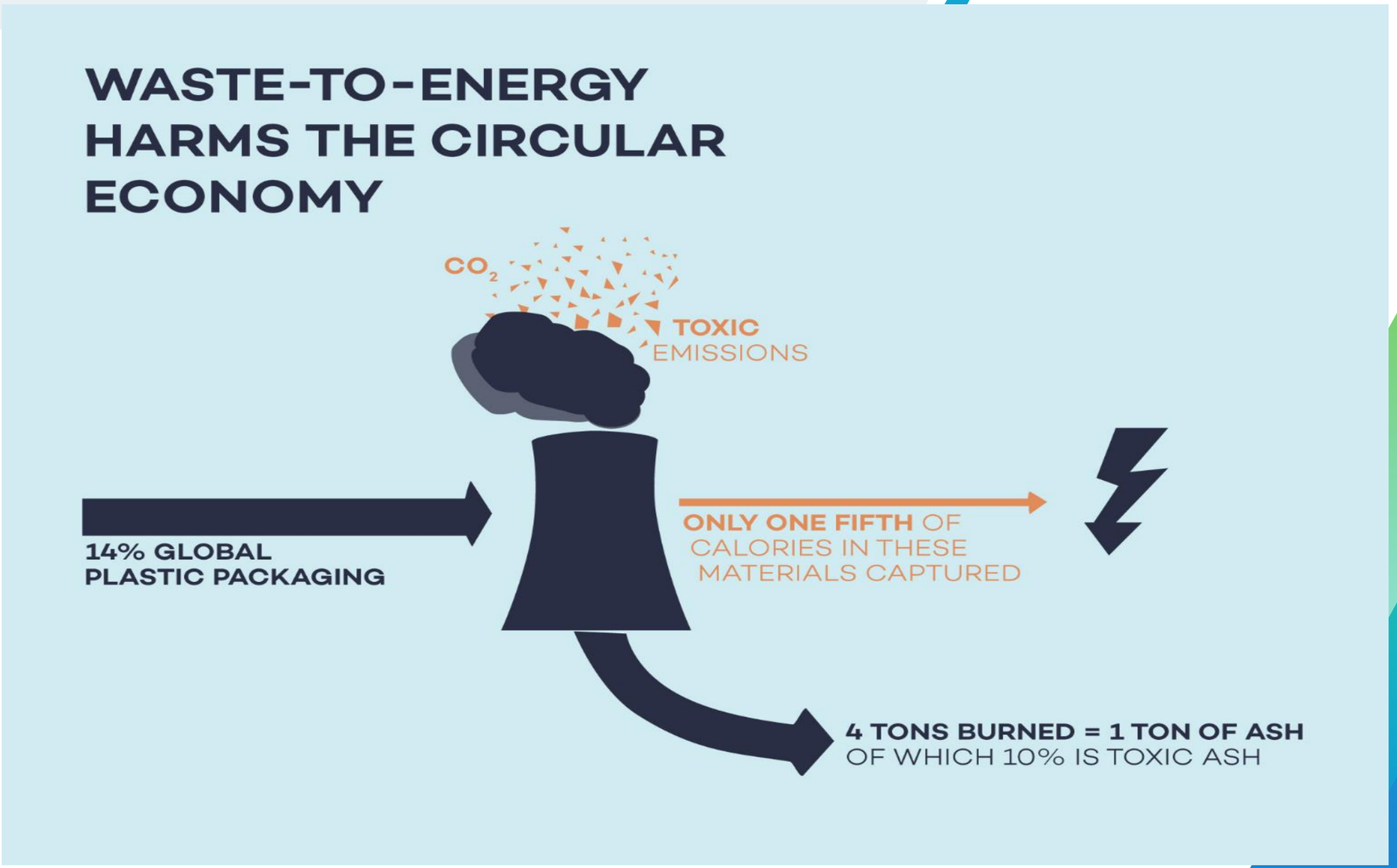

Toxics in...
Circular
Economy
Toxics out...

Chemistry and Materials matter

- Persistent, toxic chemistries have no place in a circular economy - e.g. PFAS lasts forever
- Materials matter - most plastics are problematic in a circular system

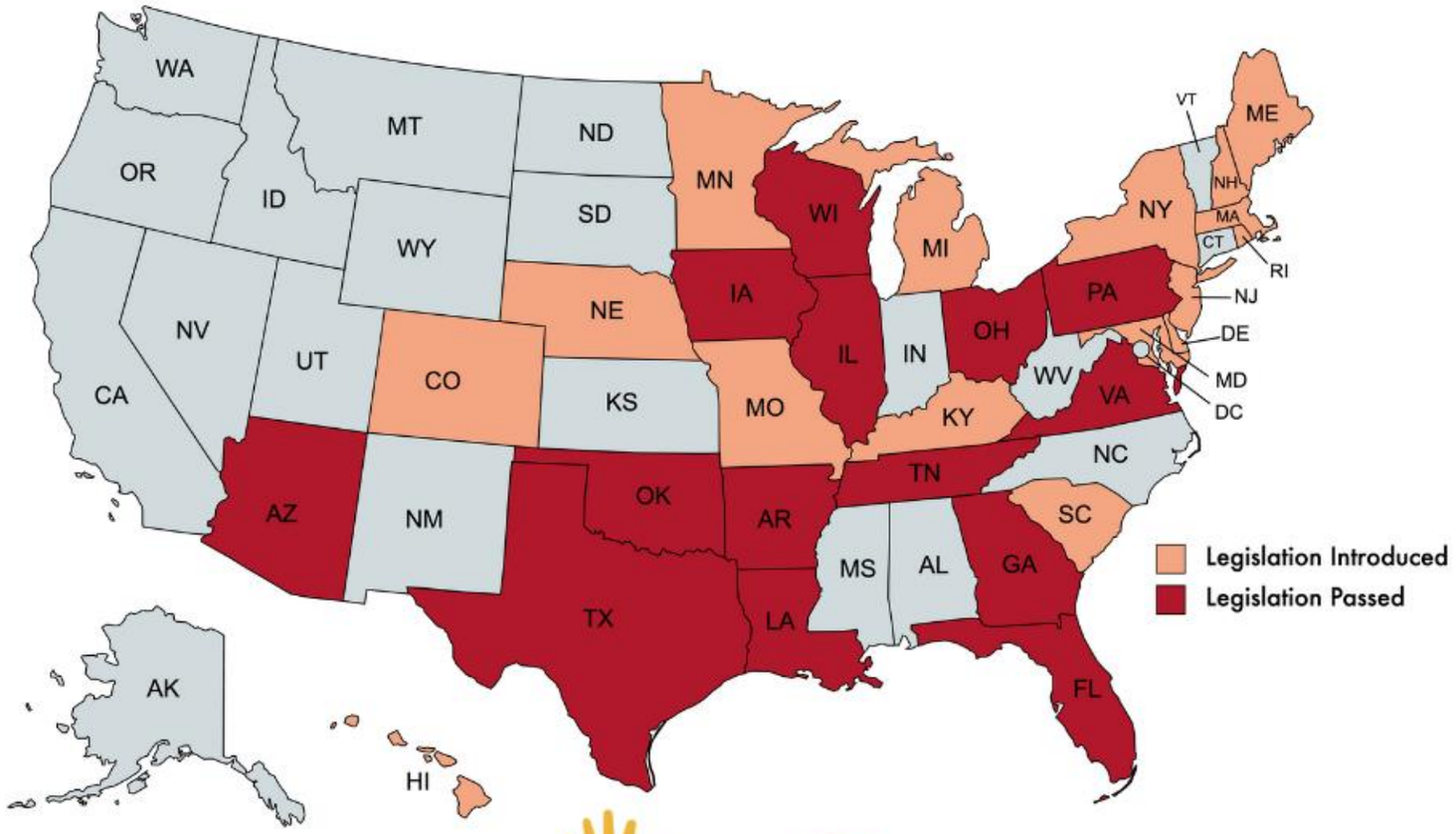
False Solutions

What industry in the US calls “advanced recycling” is largely the opposite - turning plastic into fuel to be burned.



Source: Greenpeace (https://www.greenpeace.org/usa/myths-about-ending-plastic-pollution/)

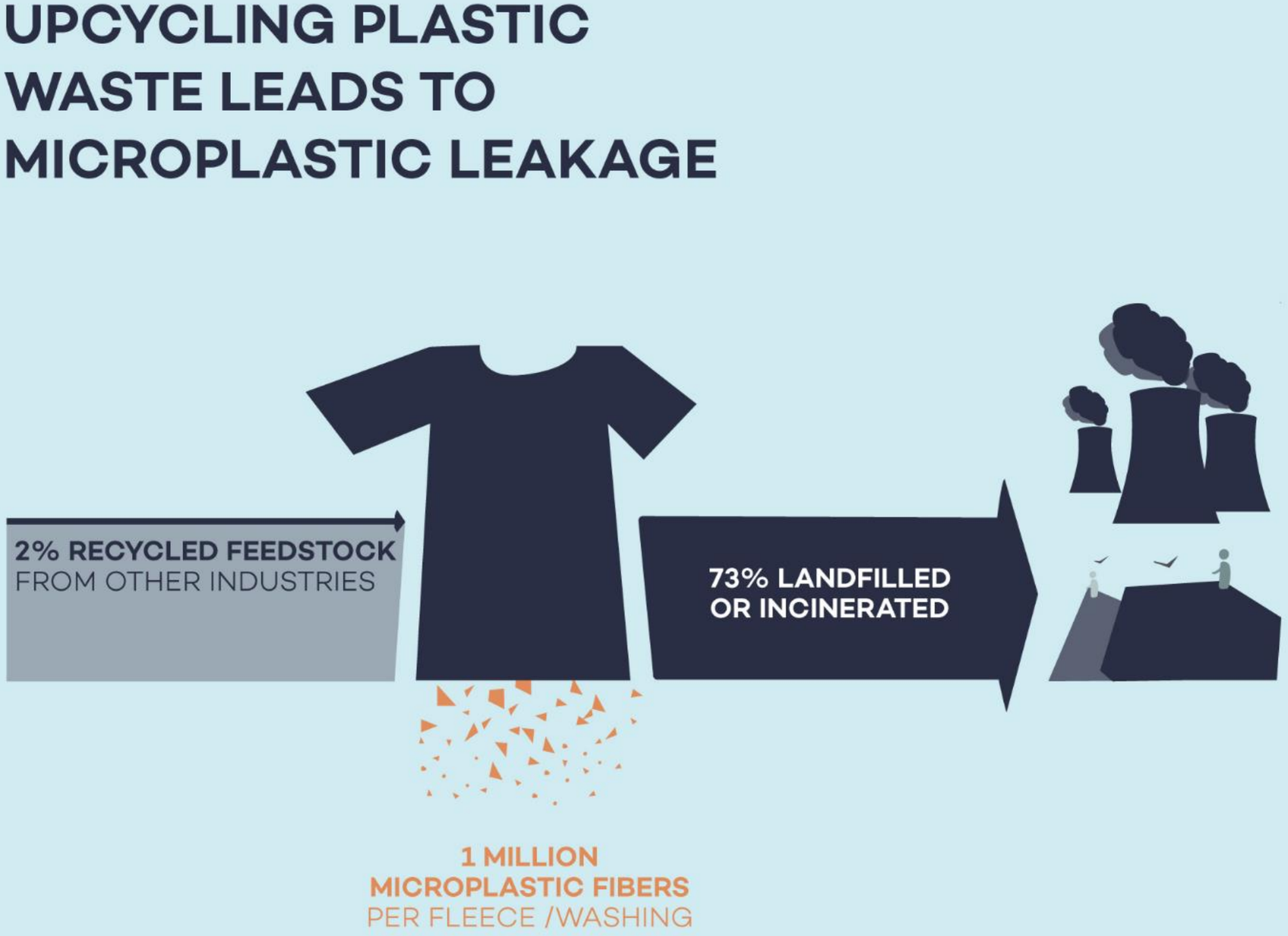
Problematic Chemical Recycling Legislation*



gaia safer states

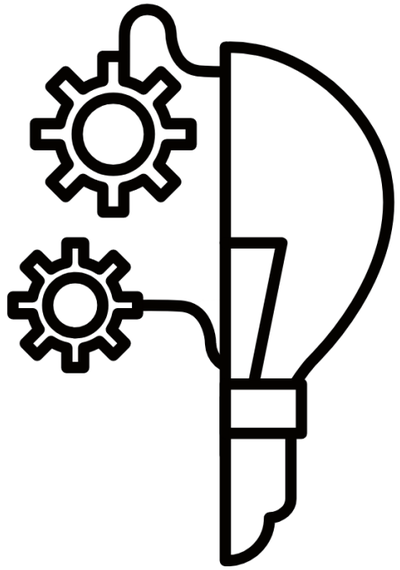
*as of July 15, 2021

Source: Greenpeace (https://www.greenpeace.org/usa/myths-about-ending-plastic-pollution/)



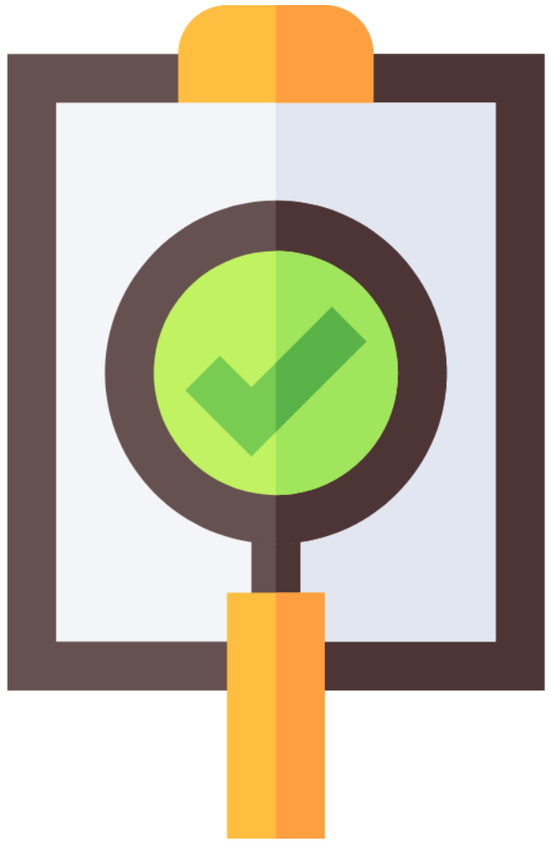
A Different Approach

- Transparency
- Design in a way that causes no harm and is intentionally designing for reuse, recycling or composting
- Look upstream



Transparency

- States policies are continuing to come online requiring more information on presence of chemicals in products



EU Bans Toxic Flame Retardants

- EU EcoDirective banned the use of halogenated FRs in electronic displays because they “represented a major recycling issue”
- Entire class of chemicals banned
- WA state following suit

Definition of “Recyclable” and “Compostable”

- New CA policy redefines what is considered “recyclable” and “compostable”
- Creates upstream pressure for redesign

Ann Arbor Purchasing Directive

- Ann Arbor policy mandates purchasing products that meet many criteria including waste reduction, energy efficiency and products safe for people and the environment.

Bottom line

- Circularity efforts must explicitly include justice and toxic considerations.
- Designing and producing cleaner materials without hazardous chemicals is key to a circular economy.
- We get there with policies that require transparency, incentivize innovation, define what is recyclable/compostable and eliminate toxic chemistries and waste.

Biz-NGO 2021 Annual Meeting
Circularity & Toxics: Food Service Ware

CEH CENTER for ENVIRONMENTAL HEALTH

Sue Chiang, Food Program Director

December 8th, 2021

CEH

A non-profit organization dedicated to protecting public health from exposures to toxic chemicals.

We work with large purchasers to utilize their buying power to incentivize the production of environmentally preferable products

Obstacles to a Circular Economy

- Our current disposable lifestyle – there is no “away”
- Can’t patch our current system by just recycling and composting more
- A healthy circular economy can’t be based on toxic products and materials

Toxic Chemicals in Products

- Just because it is legal, doesn't mean it is not hazardous
- ~12,000 chemicals may be used in the production of food contact materials globally (*Environ. Health 2020,* DOI 10.1186/s12940-020-0572-5)
- Some chemicals cause harm like cancer, birth defects and impaired fertility
- Most chemicals on the market have not been thoroughly evaluated for their toxicity

Circularity & Navigating False Solutions

Good news: Increased efforts to phase-out Single-use Plastics

- Challenge: paper, plant-based, and compostable products are seen as green and sustainable solutions

Good news: Fossil Fuels Market → Renewable Energy

- Challenge: greater investment in petrochemicals and plastics, industry trying to “fix” recycling market

Single-Use Food Service Ware (FSW)

Expanded Polystyrene Foam (EPS or ”Styrofoam”)

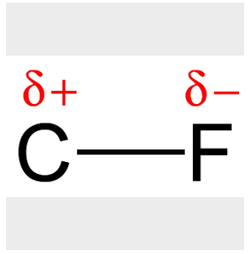
- **Styrene** is reasonably anticipated to be a human carcinogen* and can leach into food or drinks. *2011, National Toxicology Program

Single-Use Food Service Ware (FSW)

“Compostable” molded-fiber

PFAS (Per- and Polyfluoroalkyl Substances) : for grease- and water-resistance to fiber-based FSW

- “Forever chemicals” cannot be broken down by natural systems
- Associated with a wide range of adverse health effects such as cancer, thyroid disease, birth defects, hormone disruption, decreased fertility and other serious issues.



CEH CENTER for ENVIRONMENTAL HEALTH

Clean Production Action

GreenScreen Certified™: PFAS-free and Preferred Food Service Ware

https://ceh.org/green-screen-certification/

Value of GreenScreen Certification

- Independent, non-profit organizations
- Comprehensive and detailed evaluation
- Greater transparency & understanding of product chemistry,
- Facilitates communication along supply chain
- Avoids regrettable substitutes
- Creates a roadmap

Safer Reusable Food Service Ware (FSW)

- Toxic chemicals in the products will affect people and our planet throughout the whole life cycle.

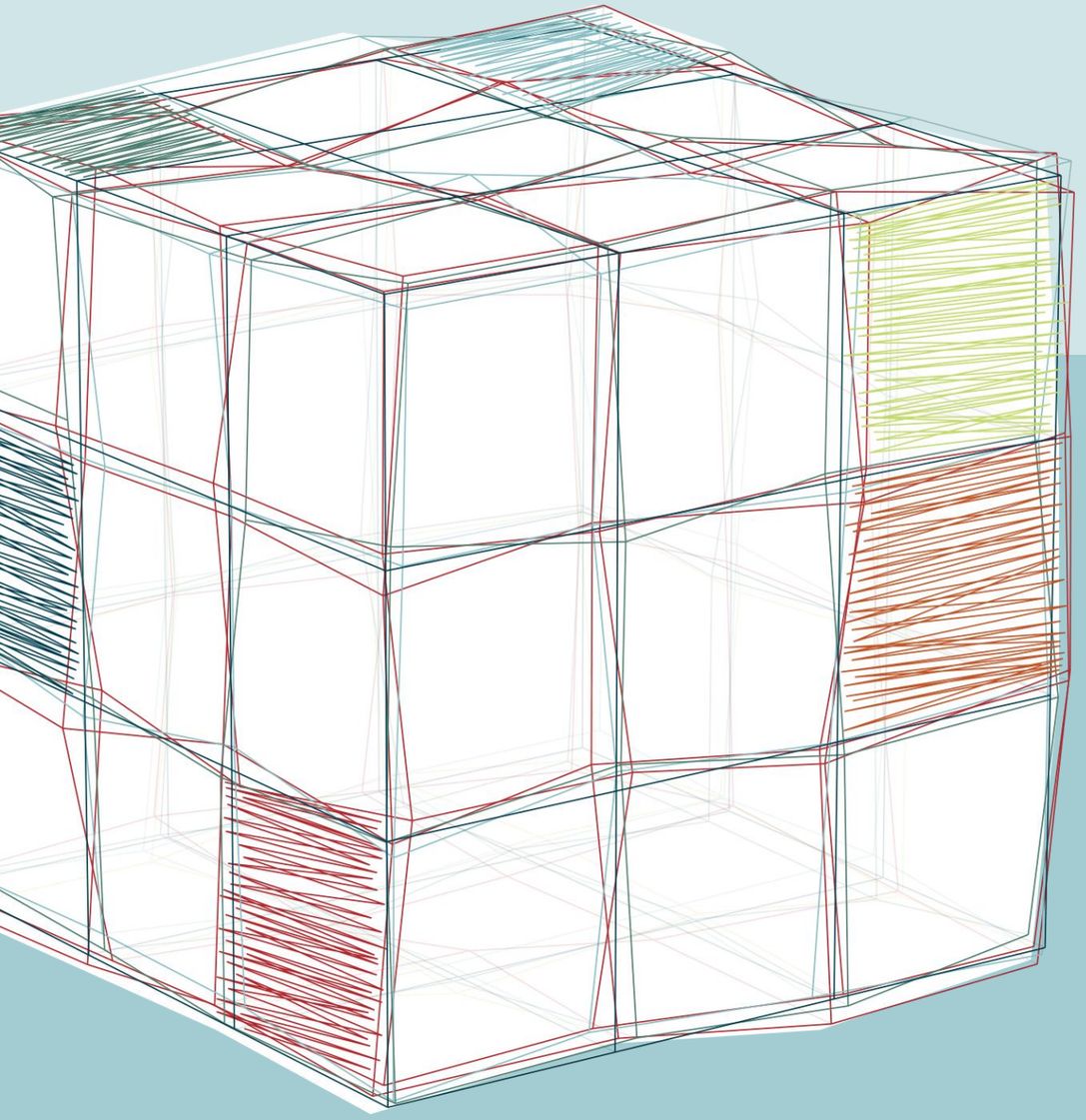
- Safer chemistry and materials matter on the path to a safer, healthier, circular economy.

CEH CENTER for ENVIRONMENTAL HEALTH

Thank you!

Sue Chiang
Food Program Director
sue@ceh.org

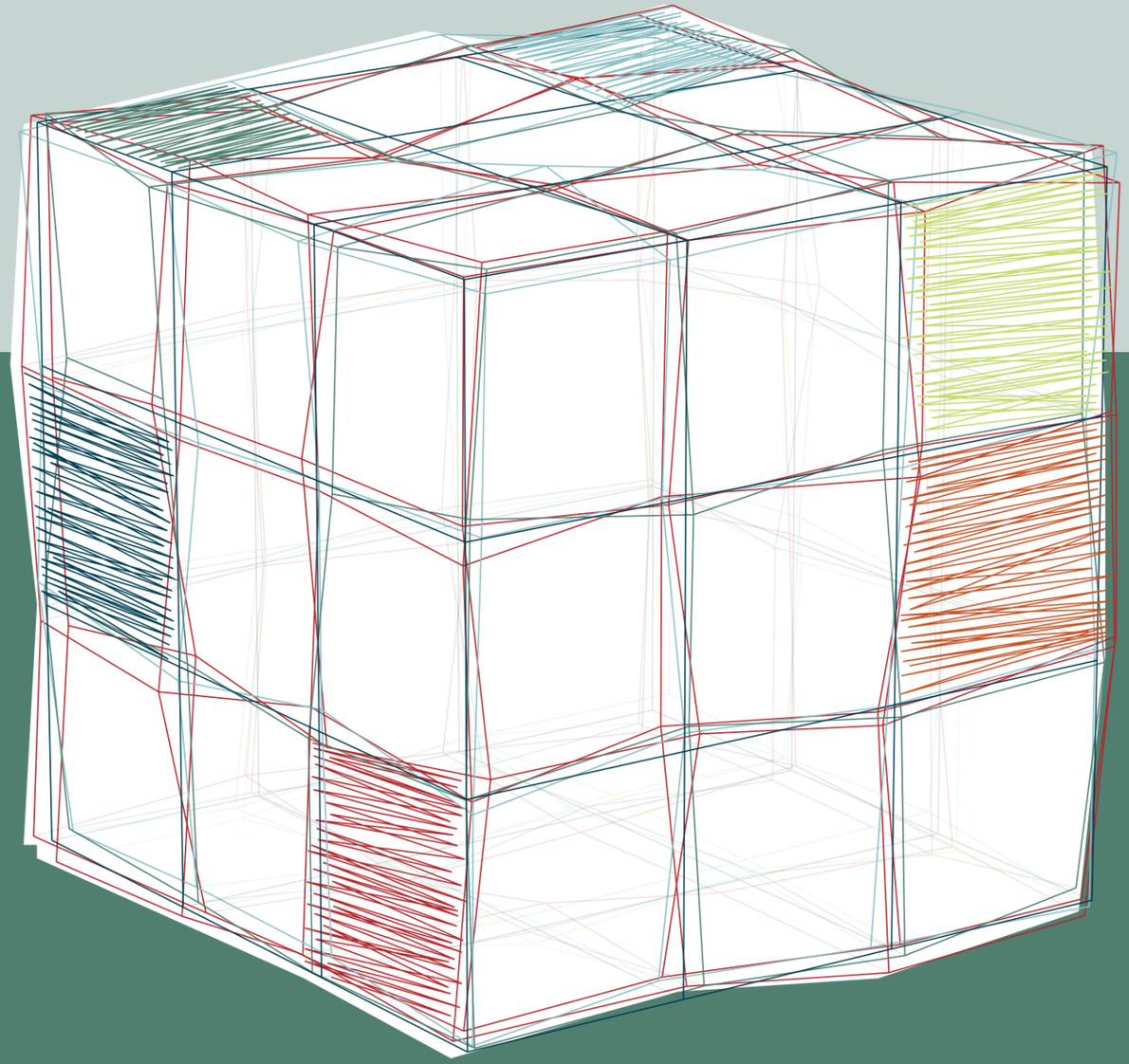
www.ceh.org/foodware



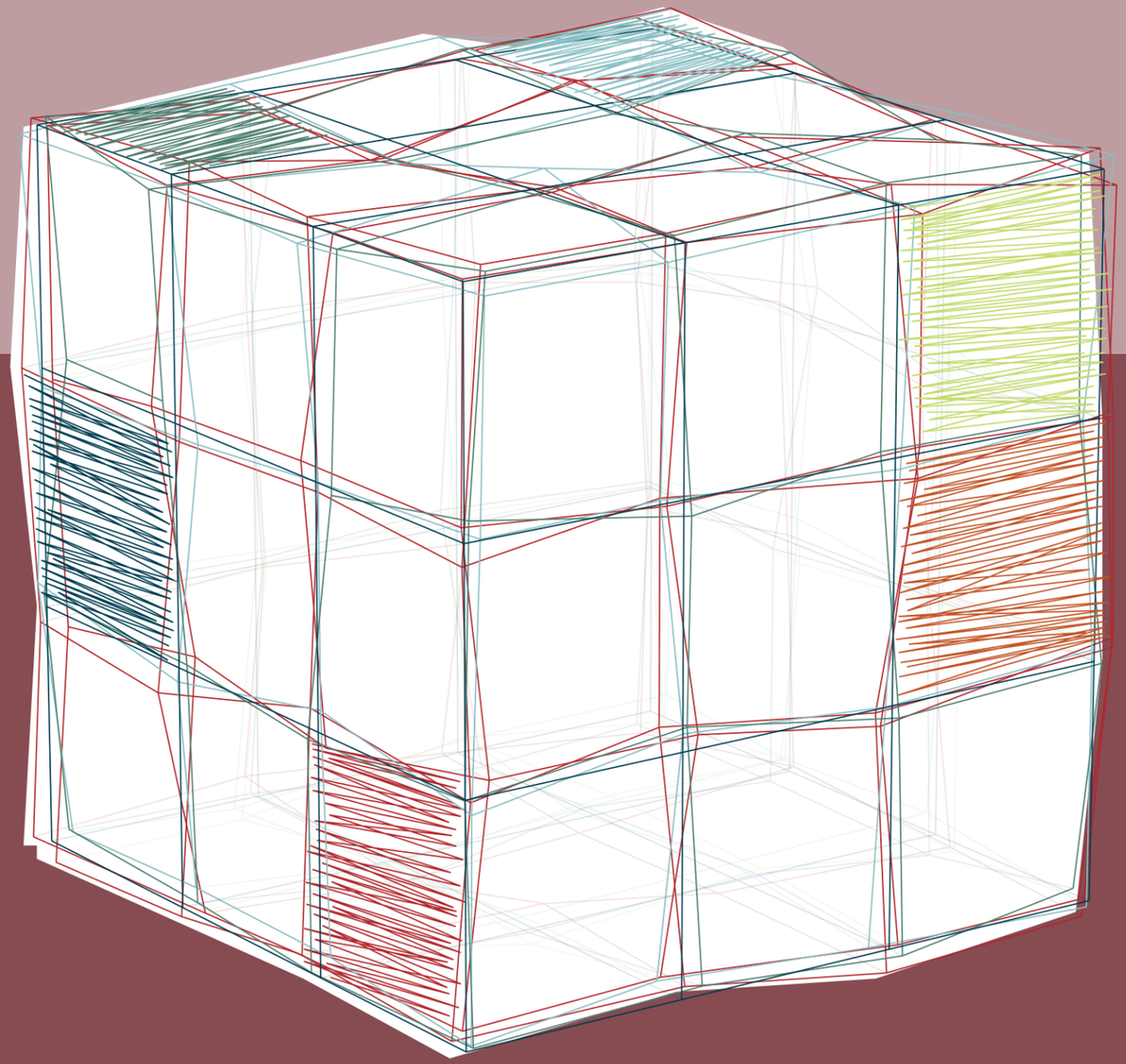
SOLVING THE PUZZLE

Addressing the challenges
and solutions to circularity and
materials health for manufacturers

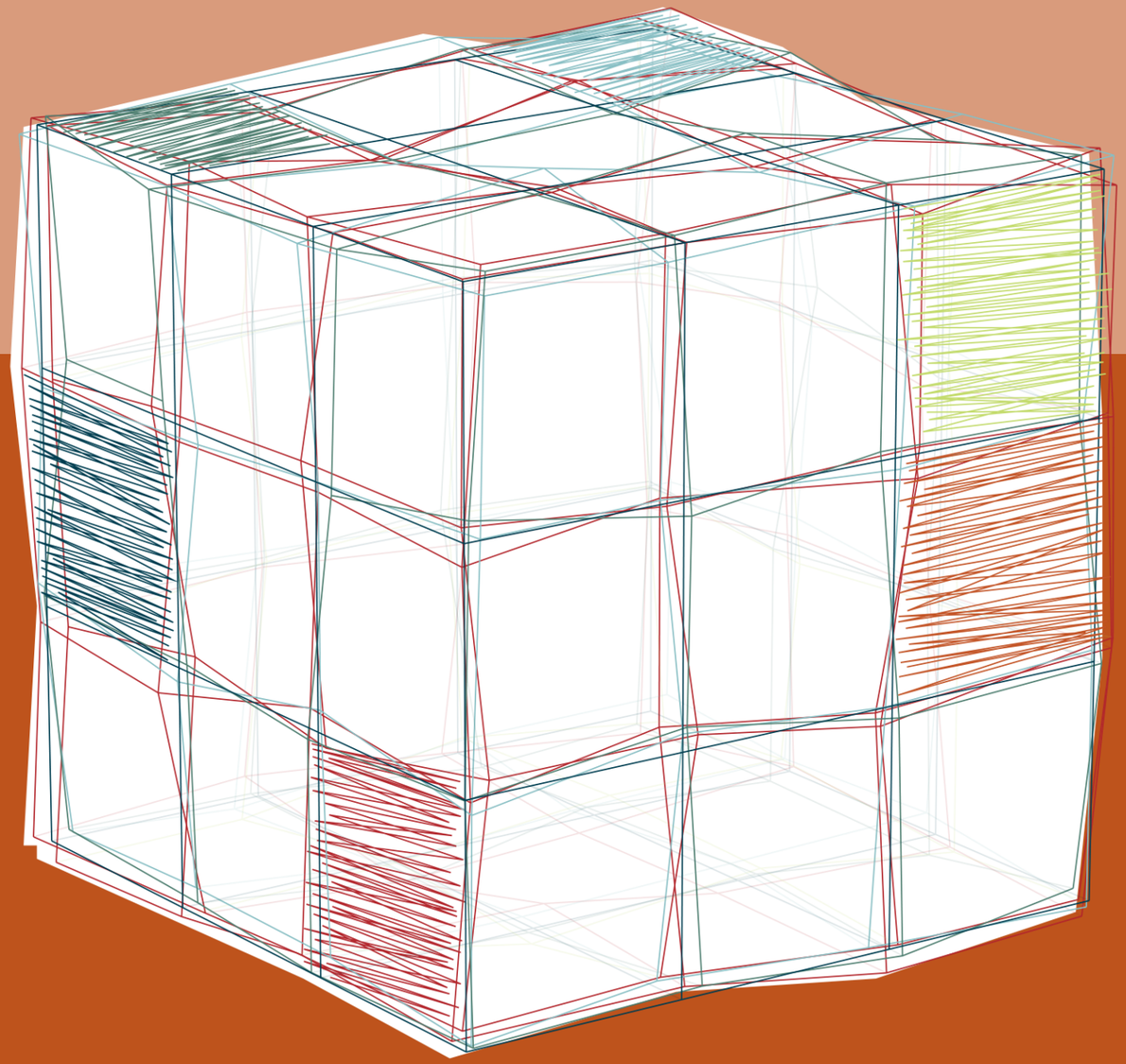
THE INTERCONNECTIVITY



MATERIAL HEALTH & CIRCULARITY



CLIMATE
& CIRCULARITY



SOCIAL JUSTICE & CIRCULARITY

GETTING STARTED

CRADLE TO CRADLE | GUIDING PRINCIPLE & THIRD-PARTY ASSESSMENT

CERTIFIED®

cradle to cradle

PRODUCTS PROGRAM

- material health
- product circularity
- clean air & climate protection
- water & soil stewardship
- social fairness

GOING FURTHER, FASTER

WHAT'S NEEDED

For Even Greater Circularity Success

RECYCLED MATERIALS LIKELY CONTAMINANT DATABASE

RISK ASSESSMENT CRITERIA

(For what's already in the market)

EFFECTIVE TAKEBACK SYSTEMS

4:35 Q&A

The floor is open to ask questions to our presenters or share your thoughts/reactions to their presentations.

Indicate you have something to say by typing it in chat or raising your hand.

Session 5 Small groups

4:00 Presentations

4.35 Q&A

4.45 Small groups

5.15 Report backs & wrap up

5.30 Adjourn

Logistics

1. Note taker
2. Someone to report back: three highlights from discussion

1. How is your organization (or what are your interests in) addressing circularity and toxics?

2. What methodologies/frameworks or principles are necessary for mainstreaming chemical concerns into circularity efforts?

3. What is needed to increase awareness about the circular economy and environmental justice?

Clean Production Action

BizNGO

Session 5 – Report backs

4:00 Presentations

4.35 Q&A

4.45 Small groups

5:15 Report backs & wrap up

5.30 Adjourn

Popcorn

Three highlights from each small group

Thank you for joining

Today's presentations and slides will be made available at www.bizngo.org.

Please fill out the evaluation form for this session!

Join BizNGO workgroups at www.bizngo.org/get-involved/join-bizngo.

cpa
Clean Production Action

BizNGO